

CALIBRATION AND VERIFICATION LOG (FDEP SOP FT 1000-FT 1500, FD 1000-FD 4000)

Boldly "X" this box if there are qualified data on this page.

Meter ID: YSE #3

RQ- 2019-02-25-09

Project: JONES Creek SCI

Notes: (1) Always wait for meter to stabilize before recording any readings.

(2) Report all digits displayed. Do not round before reporting measurements. (See special instructions for depth).

(3) For Calibrations, record calibrated meter reading. Do not record initial meter reading before calibration.

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification _____

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp °C	Baro- meter mmHg	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	P.O'Connor	02-26-19	0725	22.33	760	8.69	8.69	99.9		1.10086	P/F	L/F
ICV	✓	✓	0730	22.50 22.43	760	8.66	8.65	99.9		1.10086	P/F	L/F
CCV	J.P. Amsh	2/26/19	1445	20.6	760	8.98	9.00	100.3		1.0984	P/F	L/F
CCV											P/F	L/F

DO Acceptance criteria from Table ± 0.3 mg/L.

Rapid-Pulse Sensors: DO Gain Range 0.7 to 1.4; DO Charge Range 25-75.

Optical: DO gain range 0.85 to 1.15 (Pro D55 0.75 to 1.50); DO charge N/A. Steady-state & Galvanic Sensors: DO Gain & Charge N/A.

Spec. Cond. FT 1200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard μ mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	P.O'Connor	02-26-19	0735	190125B	02-2020	1000	1010	P/F	L/F
ICV	✓	✓	0738	180711B	07-2019	100	104	P/F	L/F
CCV	J.P. Amsh	2/26/19	1449	190125B	2/2020	1000	1010	P/F	L/F
CCV								P/F	L/F

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP FT 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	P.O'Connor	02-26-19	0740	2811E61	11-2020	7.00	23.1	6.99	-22.3	P/F	L/F
Calibr.	✓	✓	0743	2811D41	4-2020	4.00	23.16	4.00	154.8	P/F	L/F
Calibr.	✓	✓	0745	2810F55	04-2020	10.00	23.22	9.98	-193.1	P/F	L/F
ICV	✓	✓	0748	2811E61	11-2020	7.00	22.98	7.04	-23.0	P/F	L/F
CCV	J.P. Amsh	2/26/19	1450	2810F55	4-2020	10.00	23.2	10.03	-194	P/F	L/F
CCV										P/F	L/F

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 ± 50 ;

mV pH 4 Range $+180 \pm 50$;

mV pH 10 Range -180 ± 50 ;

If mV are recorded: slope from 7 to 10 _____, slope from 4 to 7 _____ (both must be between 165 and 180 mV)

Does meter have a depth sensor that will be used to measure total depth & sample depth? YES / NO / NA (not surf. water project)

If YES, complete daily Calibr. & ICV below and list date of last quarterly depth verification: _____

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: _____; Date of last verification: _____

Depth Sensor (Daily Calibration & ICV)	Name	Date	Time CT-ET	Calibrated Value (0.00 or Offset), meters	ICV Value, meters	Pass/ Fail	Lab/ Field
Pressure mode in air						P/F	L/F

Report two decimal places. Round numbers ≤ 4 down, ≥ 5 up. ICV acceptance criteria $\pm 5\%$ or ± 0.05 m, whichever is greater.

COMMENTS:

Chyan R

3/4/19

Scanned 3/5/19 DP

CALIBRATION AND VERIFICATION LOG (FDEP SOP FT 1000-FT 1500, FD 1000-FD 4000)

Boldly "X" this box if there are qualified data on this page.

Meter ID:

PRO DSS

RQ:

2019-02-25-06

Project:

BMAP 1

Notes: (1) Always wait for meter to stabilize before recording any readings.

(2) Report all digits displayed. Do not round before reporting measurements. (See special instructions for depth).

(3) For Calibrations, record calibrated meter reading. Do not record initial meter reading before calibration.

Temperature (Quarterly) FT 1400

Date of Last Temperature Verification 2/2019

DO DEP SOP FT 1500	Name	Date	Time CT-ET	Temp °C	Baro-meter mmHg	D.O. Chart mg/L	Meter D.O. mg/L	% DO	Probe Charge	Probe Gain	Pass / Fail	Lab / Field
Calibr.	C. Ruben	2-26-19	0747	22.8	765	8.61	8.67	99.9	-	-	P/F	L/F
ICV			0750	22.9	766	8.59	8.67	100	-	-	P/F	L/F
CCV	AKelmbacher	2-26-19	1315	21.2	764	8.88	8.96	101.0	-	-	P/F	L/F
CCV											P/F	L/F

DO Acceptance criteria from Table ± 0.3 mg/L.

Rapid-Pulse Sensors: DO Gain Range 0.7 to 1.4; DO Charge Range 25-75.

Optical: DO gain range 0.85 to 1.15 (Pro DSS 0.75 to 1.50); DO charge N/A. Steady-state & Galvanic Sensors: DO Gain & Charge N/A.

Spec. Cond. FT 1200	Name	Date	Time CT-ET	Lot #	Expir. Date	Standard μ mhos/cm	Meter Reading μ mhos/cm	Pass / Fail	Lab / Field
Calibr.	C. Ruben	2-26-19	0753	190125B	2/2020	1000	1006	P/F	L/F
ICV			0755	186711B	7/2019	100	102	P/F	L/F
CCV	AKelmbacher	2-26-19	1317	190125B	2/2020	1.000	1.002	P/F	L/F
CCV								P/F	L/F

Conductivity Acceptance criteria $\pm 5\%$

pH DEP SOP FT 1100	Name	Date	Time CT-ET	Lot #	Expir. Date	pH Buffer SU	Temp °C	Meter reading SU	mV	Pass / Fail	Lab / Field
Calibr.	C. Ruben	2-26-19	0800	2811E61	11/2020	7.	23.1	7.14	-44.3	P/F	L/F
Calibr.			0803	2811D47	11/2020	4.	23.1	4.08	137.3	P/F	L/F
Calibr.			0806	286F55	4/2020	10.	23.2	10.03	-215.2	P/F	L/F
ICV			0808	2811E61	11/2020	7.0	23.2	7.06	-43.2	P/F	L/F
CCV	AKelmbacher	2-26-19	1320	2810F55	4/2020	10.0	23.3	9.97	-214.0	P/F	L/F
CCV										P/F	L/F

pH Acceptance criteria ± 0.2 SU; mV pH 7 Range 0 ± 50 ;

mV pH 4 Range $+180 \pm 50$;

mV pH 10 Range -180 ± 50 ;

If mV are recorded: slope from 7 to 10 _____, slope from 4 to 7 _____ (both must be between 165 and 180 mV)

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If YES, complete daily Calibr. & ICV below and list date of last quarterly depth verification: _____

If NO, what will be used? (circle one) Secchi Disk Line / Sonar Unique ID: _____; Date of last verification: _____

Depth Sensor (Daily Calibration & ICV)	Name	Date	Time CT-ET	Calibrated Value (0.00 or Offset), meters	ICV Value, meters	Pass / Fail	Lab / Field
Pressure mode in air	C. Ruben	2-26-19		0.00	0.00	P/F	L/F

Report two decimal places. Round numbers ≤ 4 down, ≥ 5 up. ICV acceptance criteria $\pm 5\%$ or ± 0.05 m, whichever is greater.

COMMENTS:

Chyane R 3/4/19 Scanned BD 3/5/19